Panel 2.3 Fashion & Costume
Application of Tradition to Modern Market
Study of Traditional Lattice Smocking to Fashion Textiles

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Abstract
In many findings, smocking is classified as a kind of craftsmanship, which stated as a kind of embroidery technique to control fabric fullness by creating gathers and enhances elasticity in garments. (Dorothea Hall, 1999) It had been applied in various textiles products such as pillow, costume and curtain from Middle Ages to present. Smocking commonly uses in cuffs, bodices, neckline and waistline in costume.

In these decades, smocking has been transformed from costume and living goods to fashion and art pieces. It is commonly found in high-street fashion collections and, even, used as a media by many modern textiles artists for expressing concept and ideas as well. Those textiles artists developed their own interpretations of conventional smocking stitches to secure folds and create aesthetic effect.

Smocking varies in combination of pattern, stitches, threading and fabric. This paper aimed to explore more possibilities through combining and mix matching different materials and technique and present it in modern and contemporary way and to identify the joint techniques and smocking materials that creates optimal textural textiles effect. Fabric swatches would be outputted and it is considered to be a useful reference for the research and development of future smocking study.

1. Introduction
Being one of the categories of embroidery, smocking plays an important role in textile design from Middle Ages to present. It is a kind of craftsmanship that holding gathers in place by variety of stitched patterns. (Keay, 1985) It is traditionally used to decorate the English folk costume, smock, and represent status of wearer. It is multi-functional that could be used to control fullness of the garment and as a decorative embellishment as well. (Keay, 1985) The materials were usually based on home-spun linen, drabbin and spin flax, rather than fine fabric and decorated with self-coloured linen thread.

Smocking starts getting rid of the shadow of craftsmanship and developing in a more modern way that also widely used in art pieces by textiles artist as well. Smocking is commonly found in haute couture collection such as Valentino, Yiqing Yin and Junya Watanabe. Also, today’s smocking has fewer boundaries on geometric pattern and works are more focus on freedom expression. (Cave & Hodges, 1984). It becomes a common technique in fibre art. Many contemporary textiles artists such as Barbara Hilts, Polly Binns and Ealish Wilson are specifically famous in creating art pieces by smocking.

Hall (1999) believed that smocking did not go behind fashion and art and there are unlimited permutations and possibilities with experimental in mind. He supported to think more creative in smocking and encouraged people to try more on different smocking methods. Knott also agreed this idea that he described smocking as music that creation is endless by combining different coordination. (Knott, 1962) He suggested smocking pattern design should have more freedom by repeating basic stitches in various ways.

1.2 Aim and objectives
This paper aimed to explore the possibilities and limitation in smocking through combining and mix matching different materials and technique and present it in modern and contemporary way to identify the joint techniques and smocking materials that creates optimal textural textiles effect. Fabric swatches would be outputted and it is considered to be a useful reference for the research and development of future smocking study.

1.3 Scope of study
This scope of study included the historical background and techniques from middle Ages to nowadays, materials in preparation and development of smocking. The development of smocking technique would be highlighted for more comprehensive understanding on changes and differences between traditional smocking and modern smocking. Afterward, experiments of combining smocking with different advanced technologies like digital printing and embroidery are carried out in laboratories.

2. Methodology
There are two data sourcing methods are used in the study to obtain a comprehensive study about smocking which are literature review and experiments. Literature view is carried out to have an overall ideas and concept of the past history of smocking. It collected and gathered information from various sourcing such as reference books, journals, articles, magazines and websites. After review the background and techniques of smocking, a series of experiments were carried out
3. Results
The experiment of creating contemporary smocking offers an opportunity to explore and develop a new dimension of the technique with different materials. Two experiments with a variety of materials and techniques would be conducted and the corresponding procedure and details in creation would be recorded. The possibilities and potential of creating textural effects and the application of contemporary smocking in fashion collection would, then, be examined. To have a concentrate and comparative experimental result, only one specific type of smocking is selected. In this project, Lattice smocking would be chosen for developing the experiment, which based in its popularity and flexibility.

3.1 Preparation
Base materials in smocking referred to fabrication. In this project, cotton woven fabric, and wool flannel are chosen as the base materials as they are in medium weighted and in natural material is easier to be smocked. Natural fibre is considerate as a preferable and common fiber that could hold a certain shape of gathers. The structure of woven fabric is more suitable for smocking if compare to knitted fabric as the weft and wrap yarn could act as a coordinate that convenient smocker to stitch on the ideal location.

Also, various kinds of tools would be used in between the experiments. Tools used in preparation for grids and dots marking included pencil and dots transfer paper. Besides, normal tools like embroidery needles, scissors and laying tools would also be used during smocking process.

For combining techniques of smocking and embroidery, a Tajima multi-head embroidery machine was used for machine embroidery before smocking. Tajima multi-head embroidery machine is a computerized automatic machine that provided high quality and efficient embroidery by entering the designed programme of embroidery pattern and stitch types that generated by a software, Tajima DG/ML.

3.2 Theme development
Considering contemporary smocking in art piece and fashion focus on emotion and conceptual expression, it is believed that theme selection and development is the key consideration before experiments. A specific theme is picked randomly as "Traditional Hong Kong culture".

3.3 Experimental swatch 1
Materials: 1-inch glass tube beads, metallic threads, cotton woven fabric
Tools: ruler, pencil and needle
Techniques: French knot stitch

Experimental swatch 1 is inspired by old building in Hong Kong, which combines different sizes of quadrangular shapes such as rectangle and square that created by Lattice smocking to imitate the construction of the architecture. It was created to review the natural twists and staggers of gathers formed in irregular smocking pattern. The level of twists and staggers increase according to the concentration of stitches. If the stitching works too close, the gathers would expand and the fabric would look messy and defective. In order to reduce the unattractive appearance created by the staggers of gathers, glass tube beads were added horizontally and randomly in between the gaps of the quadrangular shapes to link the corners together to visually distract the view. It could not only enrich the color and texture of the swatch, but also increased the sense of coherence.

3.4 Experimental swatch 2
Materials: 1-inch round coral beads, 3mm sphere pearl white beads, embroidery threads, 50% wool 50% viscose flannel
Tools: ruler, pencil and needle, Tajima embroidery machine
Techniques: French knot stitch

Figure 1 Inspired by old building in Hong Kong (J Choy, 2011)
Figure 2 Right side of experimental swatch 1
Figure 3 Inspired by the old window pattern of Hong Kong (Icsd, 2014)
4. Discussion and Conclusion

The study begins with a literature study on the smocking including background and development. And some significant examples of lattice smocking in fashion and art industry are reviewed to have a clear picture of the trend. The historical background and the potential of development in smocking add value to itself thus make us believed its unlimited possibilities. And it drives smocking to a different world from transitional craftsmanship.

In order to explore more possibilities in contemporary lattice smocking, 2 experimental swatches were produced in a selected theme. The making process and development of the experimental swatches are recorded and showed the possibility and uniqueness of contemporary smocking. It provides a deep understanding towards the limitations and constraints of materials and techniques as well. Although there were difficulties and problems during the design process, the experience was considered as a worthwhile and enjoyable investigation. And the experimental swatches are considered as successful in exploring contemporary smocking as they are expressing a concept by combining different style and technique together in an aesthetic way.

It is believed that the structure of smocking would be more irregular and complicated with random stitches and combination of different techniques. It is believed that mix and match could help brainstorming ideas and inspiration, explore in new dimension by combining unrelated materials and technique together. This combining technique also works on smocking. It would complement and enhance the richness texture of each other.

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6. References


Debbie Shore (2013) Modern Smocking Canadian Smocking Techniques & Patterns Part2, Vivebooks, p.5-8

Grace Knott (1962) English Smocking: The How to, Frederick Muller Ltd, p. 5-20

Margaret Thom (1972) Smocking in Embroidery, Batsford, p.23-34, p. 66-80

Dorothea Hall (1999) Contemporary smocking, Guild of Master Craftsman Publications Ltd., p. 5-18,p. 43-55

In experimental swatch 2, smocking technique and beadings embellishment was done in both side of the fabric for multi-usages and make use of the concept of reverse smocking. In this experiment, reverse smocking is applied in Lattice smocking that the second stitching was done inside the first smocked area to make a floral like pattern. It aims to test the manipulation of the fabric to enhance rich tactile effect. In addition, the floral pattern gives an impression of elegance to enhance the luxury of the swatch. It used both hand and machine embroidery. 2-inches circles are firstly embroiled by Tajima multi-head embroidery machine before smocking. And those circles are matched with the square created in this type of smocking to present a geometric style.

Moreover, it is inspired by the pattern of old windows in Hong Kong, which mostly contains flower-like pattern inside. The experimental swatch 2 successfully generated a similar flower-like pattern by adopting reserves smocking technique in order to express the classic style of the traditions.

3.5 Summary of experiments

In the experiments, materials were gathered, folded, embroiled with a specific theme to create contemporary smocking effects. The overall experiments performance was in satisfied condition. Most of the materials used in smocking provided successful tactile effects that were appreciated from an aesthetic perspective and offered good potential for various end uses in fashion and textile design. It is found that although the appearances look totally different between 2 experimental swatches, the stitching method and type of smocking adopted in both swatches are totally the same but only are different in sizing and placing. In other words, there are many variations and possibilities in a type of smocking technique.


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